UTAH OCCUPATIONAL SAFETY & HEALTH

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"SAMPLE" FALL PROTECTION PLAN

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FALL PROTECTION PLAN

INDEX

PREFACE

THIS SAMPLE FALL PREVENTION PLAN IS TO BE USED AS A <u>GUIDE ONLY</u> IN THE DEVELOPMENT OF FORMAL WRITTEN FALL PREVENTION PLANS. INDIVIDUAL COMPANY CIRCUMSTANCES VARY WIDELY AND, THEREFORE, THIS PLAN HAS TO BE MODIFIED TO REFLECT ACTUAL OPERATIONS. EACH COMPANY MUST DEVELOP AND EVALUATE EACH FALL PREVENTION PLAN ON A SITE-BY-SITE BASIS.

THE PLAN IS DESIGNED TO HELP PREVENT INJURIES ASSOCIATED WITH FALLS. THE COMPANY MUST PERIODICALLY REVIEW THE WRITTEN FALL PREVENTION PLAN IN AN EFFORT TO COMPLY WITH THE FALL PREVENTION STANDARD AS INTERPRETED BY; UTAH OCCUPATIONAL SAFETY & HEALTH (UOSH), DECISIONS OF THE UTAH COURT OF APPEALS, AS WELL AS FEDERAL OSHA INTERPRETATIONS AND COMPLIANCE DIRECTIVES.

JOB SITE AND PLAN INFORMATION

_____hereinafter referred to as "company" has designed this fall protection plan for _____ framing to ensure that our employees risk to fall hazards are reduced or eliminated. A copy of the fall protection plan will be maintained at the company's central office and shall be maintained at the job site.

This fall protection plan is effective at the following job site***(1)***

Location of Job: _____

_____

The fall protection plan applies to all elevations identified in the attached list that are under construction within the development at the above-described location.

Date Plan Prepared or Modified: _____/_____/_____

Plan Prepared By the Following Qualified Person(s):

Plan Approved By: _____,

Plan Implemented By: _____, FOREMAN

_____

(1) *The definition of a **"job site"** includes the development. A separate fall protection plan is not required for each elevation in a particular development, unless there are substantial differences in the construction of development buildings by the same employer within a development. If one fall protection plan is utilized for a development, it is intended to address each elevation in that plan.*

STATEMENT OF COMPANY POLICY

The Company is dedicated to the protection of its employees from on the-job injuries. All of our employees have the responsibility to work safely on the job. The purpose of this plan is to supplement our existing safety and health program and to ensure that every employee who works for us recognizes workplace fall hazards and takes the appropriate measures as outlined in the plan to address those hazards.

It is the responsibility of the Company to ensure that all employees understand and adhere to the procedures of this plan and to follow the instructions of the foreman or competent person**.(2)**
Any changes to the Fall Protection Plan must be approved by a qualified person or, in some cases, a registered engineer.**(3)**

TRAINING

The Company will incorporate "on the-job training" as part of the employees' training regarding fall hazards. Each employee will be trained in the procedures described in this plan and will strictly adhere to them, except when doing so would expose the employee to a greater hazard.

If employees believe that they may be subjected to a greater hazard by complying with the Company's policy, the employee must notify the foreman or competent person and have the concern addressed before proceeding with the task. It is also the responsibility of all employees to bring to the employers attention any unsafe or hazardous conditions or practices that may cause injury to either themselves or other employees.

Employees must satisfy the criteria of the Company's fall protection training program within 30 days of employment. The Company reserves the right to periodically evaluate employees on elements of fall protection training and retrain employees, if necessary.

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*(2) Pursuant to 29 C.F.R. § 1926.32(F), a **"competent person"** is defined as one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.*

*(3) Pursuant to 29 C.F.R. § 1926.32(M), a **"qualified person"** is defined as an individual who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.*

After completing the training program, the Company will retain a copy of the fall protection training verification in the employee's personnel file.

If the Company hires an employee, the employee may provide the Company a copy of his training or the Company can verify that the employee has previously received fall protection training from an employer. If the employee has previously been trained, the Company still must determine whether the employee requires retraining. Circumstances in which retraining is required include changes in the workplace which render previous training obsolete, changes in the type of fall protection systems or equipment used, or inadequacies in an employee's knowledge or use of fall protection systems or equipment that indicate that the employee has not retained the requisite understanding or skill.

Employees who have completed the Company's fall protection training or who have previously completed such training with a different employer, are qualified to complete the tasks identified in this plan and are authorized to enter the controlled access zone.

RESIDENTIAL CONSTRUCTION

For the purposes of compliance guidance, the term ***"residential construction"*** applies to structures where the working environment, and the construction materials, methods, and procedures employed are essentially the same as those used for typical house **(single-family dwelling)** and townhouse construction. Discrete parts of a large commercial structure may come within the scope of this directive (for example, a shingled entranceway to a mall), but such coverage does not mean that the entire structure thereby comes within the terms of this directive.

This applies only to construction activities and does not affect any general industry activities, such as but not limited to tree trimming, that take place at residential sites. This Fall Protection Plan addresses the use of designated fall protection on the residential job site, as well as identifies specific activities that require alternative work practices as a means of fall protection.

ALTERNATIVE WORK PRACTICES

During the construction of residential buildings, it is sometimes infeasible or creates a greater hazard to use designated fall protection systems at specific areas or for specific tasks. Such areas or tasks are more fully addressed in the following sections and may include, but are not limited to:

Installation of roof trusses and rafters;
Installation of roof sheathing;
Installation of exterior and interior walls;
Installation of floor trusses and joists and sheathing; and
Installation of eave construction, applied elevations and pop-outs

In these cases, designated fall protection systems may not be feasible or the safest choice for employees. This plan is designed to enable the Company and employees to recognize the fall hazards associated with the project and to establish the safest procedures that are to be followed to prevent falls to lower levels or through holes and openings in walking and working surfaces. This plan also seeks to minimize the amount of time an employee is exposed to a fall hazard.

RESPONSIBILITIES OF FOREMAN OR COMPETENT PERSON

It is the responsibility of the foreman or competent person to implement this fall protection plan. The foreman or competent person may designate the most experienced or qualified individuals to complete certain tasks. The foreman or competent person must designate a controlled access zone.

Continual observational safety checks of work operations and the enforcement of the safety policy and procedures shall be regularly enforced. The foreman or competent person is responsible for correcting any unsafe practices or Conditions immediately.

IDENTIFYING WHEN DESIGNATED FALL PROTECTION SYSTEMS MAY BE USED OR ARE INFEASIBLE OR CREATE A GREATER HAZARD

Pursuant to 29 C.F.R. § 1926.501, employees engaged in leading edge work or working in areas in which leading edge work is being performed, generally must be protected from falling by a guardrail system, safety net system, or personal fall arrest system. If the designated system is infeasible or subjects an employee to a greater hazard, however, the Company is not required to use one of the designated fall protection systems, but instead must comply with the alternative fall protection plan provided in 29 C.F.R. § 1926.502(k).

Although most residential trades will be able to comply with the designated fall protection methods, residential framing primarily involves constructing leading edge work; installing roof trusses and rafters, roof sheathing, exterior wall erection, floor sheathing, floor joists and trusses; and performing eave construction. As provided below, the designated fall protection methods of guardrail systems, personal fall arrest systems, and safety net systems are generally either not feasible to those construction activities or subjects employees to a greater hazard. The Company, therefore, implements this fall protection plan pursuant to 29 C.F.R. § 1926.502(k). The plan identifies the alternative work practices that must be used in section IV below, including slide guards, ladders, sawhorses, and controlled access zones. Moreover, the Company is not required to use more than one fall protection system for a particular phase of construction and, therefore, if the alternative fall protection system is appropriately initiated for a task, such as installing trusses, it may be used until the task is complete.

PERSONAL FALL ARREST SYSTEMS

Personal fall arrest systems must be rigged in such a manner that an employee can neither free fall more than 6 feet nor contact any lower level. Furthermore, anchorage points for personal fall arrest systems must be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5000 pounds, along with maintaining a safety factor of at least two.
29 C.F.R. § 1926.502(d)(15). An employee is subject to a greater hazard if such requirements are not met.

Roof and floor trusses are temporarily braced and unable to support lateral loads until sheathing has been placed and permanently installed. Temporarily braced trusses are not capable of withstanding the force requirements of personal fall arrest systems or some of the remaining technical requirements of the standard. Furthermore, anchorage points must not be inserted into trusses without analysis and approval by a registered engineer who determines that the design of the truss can withstand the additional stress and that the anchorage point satisfies the technical requirements of the standard. Accordingly, to ensure that the Company is in compliance with the fall protection standard and to ensure that employees are not subjected to a greater hazard, in no case will the use of personal fall arrest systems be considered feasible when anchored to temporarily braced trusses. Moreover, in no case should anchorage points be attached to a truss, absent express approval by a registered engineer.

For all applications where sheathing has been placed and permanently installed to truss members, personal fall arrest systems shall only be used when the anchorage points are capable of withstanding 5000 pounds, along with maintaining a safety factor of two, as verified by a registered engineer. In all other cases, the application of personal fall arrest systems in residential framing subjects an employee to a greater hazard.

GUARDRAIL SYSTEMS

The top edge height of top rails of guardrail systems generally must be 42 inches above the walking or working surface. Midrails must be installed between the top edge and the surface when there is no wall or parapet at least 21 inches high. Guardrail systems shall be capable of withstanding, without failure, a force, applied in any downward or outward direction, of at least 200 pounds. When guardrail systems are used at hoisting areas or around holes which are used as points of access, such as ladder ways, a gate shall be installed. 29 C.F.R. § 1926.502(b).

Guardrail systems may be used during some phases of residential framing. For example, guardrail systems will be used around stairwells. However, exterior and interior walls are temporarily braced and unable to support lateral loads until either the upstairs floor or roof sheathing has been placed and is permanently installed. Temporarily braced exterior or interior walls are not capable of withstanding the force requirements of guardrail systems. In no case will the use of guardrail systems be considered feasible when anchored to temporarily braced walls.

In some cases, a guardrail system may be feasible for the erection of upper-story walls. In order to be feasible, however, the guardrail system must not impede the erection of exterior walls at the leading edge. In no case will the guardrail system be installed with any projections into the building.

During the installation and disassembly of the guardrail system, employees will be exposed to an immediate fall hazard. As described above, personal fall arrest systems and safety net systems are not required to be installed during the installation and disassembly of the guardrail system. Application of guardrail systems during exterior wall erection or around stairwells, however, will subject the employee to an immediate fall hazard for an extended duration without the benefit of the designated fall protection systems.

Erection of exterior walls requires limited exposure to fall hazards during construction and erection. The erection and disassembly of guardrail systems to erect exterior walls would result in greater exposure time to workers and exposes employees to a greater hazard and, therefore, will not be used during exterior wall erection.

SCAFFOLDS

A scaffold is a temporary elevated working platform that is used to support employees and materials. The standard identifies various types of scaffolds that may be used by the Company. No scaffold can be erected or disassembled except under the supervision of a competent person. Planking, guardrails, and toe boards may be required as part of the scaffold. The poles, legs or uprights of all scaffolds are required to be plumb, and securely and rigidly braced to prevent swaying and displacement. 29 C.F.R. § 1926.451. The ground surface should be level and stable.

Exterior and interior walls are temporarily braced until either the upstairs floor or roof sheathing has been placed and permanently installed. Wall bracing is set perpendicular to the exterior and interior wall, at an angle, to keep walls standing until after either the upstairs floor or roof sheathing is permanently installed. Temporary wall bracing is in place throughout all aspects of residential framing activities. Perpendicular wall bracing prohibits proper placement of scaffold poles, legs, uprights, and bracing. 29 C.F.R. § 1926.451 (a)(15). Accordingly, scaffolds generally are infeasible or subject an employee to a greater hazard if used in installing exterior and interior walls and will be used for these activities only when expressly authorized by a qualified person.

Tubular welded frame and tube and coupler scaffolding are common to residential construction. However, the scaffold must be secured to the building or structure at intervals not to exceed 30 feet horizontally and 26 feet vertically. 29 C.F.R. § 1926.451(c)(12), (d)(7). During the framing portion of residential construction, the exterior and interior walls are temporarily braced and unable to support lateral loads until either the upstairs floor or roof sheathing has been placed and permanently installed. Accordingly, temporarily braced walls cannot be used to secure scaffolding and, therefore, are infeasible.

Moreover, exterior scaffolds cannot be utilized on this job because the ground, after recent backfilling, cannot support scaffolds. In most cases, the erection and dismantling of the scaffold would expose workers to a greater fall hazard than the erection of the trusses and rafters.

LADDERS

Ladders are used frequently in residential construction activities. Ladders occasionally serve as a work platform and to access walking and working surfaces that cannot be safely accessed from the ground. Ladders shall be used in accordance with the requirements in 29 C.F.R. § 1926.503.

During the installation of floor truss and joists and roof truss and rafters, ladders may be used to access the pre-positioned truss bundle. After the truss bundle has been accessed, workers manually may position and secure individual trusses. After securing each truss, employee(s) may traverse the plate line to access and secure each additional truss.

The use of ladders to avoid traversing the plate line would require employees to maneuver from the plate line onto a ladder, climb down a ladder, climb back up the second ladder, and maneuver from that ladder onto the plate line. Workers who use ladders for the entire installation process will be subjected to a greater hazard because the worker must stand on the ladder with his back or side to the front of the ladder. While erecting the truss or rafter the worker will need both hands to maneuver the truss and therefore cannot hold onto the ladder.

Furthermore, ladders are required to either extend three feet above the upper landing surface or be secured at the top to a rigid support. 29 C.F.R. 1926.1053(b)(1). Ladders extending three feet above the plate line would block the positioning and securing of trusses. Secured ladders must be moved and resecured after each truss is positioned. A fixed ladder would require employees to crawl around several previously secured trusses in order to access the

ladder and exit the plate line. In addition, ladders cannot be adequately protected from movement while trusses are being maneuvered into place.

Traversing the plate line requires limited exposure to fall hazards during the installation of floor trusses and joists and roof trusses and joists. Requiring employees to access and exit the plate line via ladders, however, increase their exposure to fall hazards. The use of ladders in this manner to traverse the plate line is impractical and subjects employees to a greater hazard and increased exposure time to the hazard, and therefore, ladders will not be used to install floor trusses and joists and roof trusses and joists.

Moreover, manual placement of trusses using ladders as a work platform is not feasible or practical based on the weight of the truss members and the workers limited horizontal range of motion. Furthermore, installing floor and roof trusses manually will make employees more susceptible to overexertion, a leading cause of accidents. Installing trusses manually with ladders will cause employees to be forced to avoid suspended loads and placing securing, replacing, and resecuring ladders for each individual truss, which repeatedly subjects employees to potential falls and increases fatigue.

When truss members are placed by crane, workers cannot always face the ladder, but often must turn sideways and even backwards to position and secure trusses. While manipulating overhead loads, workers need both hands to position and secure the truss. As a result, workers on ladders are often in an unstable position with both hands involved in maneuvering the truss. Furthermore, the truss member is attached to the crane until secured by the workers and cannot be used for support and, therefore, ladders subject employees to a greater hazard.

Employees are prohibited from carrying any object or load that could cause the employee to lose their balance and fall while using a ladder. 29 C.F.R. § 1926.1053(b)(22). Using ladders as a work platform to position and secure trusses or perform eave construction subjects employees to the risk of losing their balance and failing. Accordingly, application of ladders systems as a work platform during installation of floor trusses and joists, roof trusses and rafters, and eave construction is prohibited, absent express approval of a foreman or competent person.

FALL PROTECTION SYSTEMS TO BE USED AT JOB SITE

Installation of roof trusses and rafters, roof sheathing, exterior wall erection, floor sheathing, floor joist and truss construction, and eave construction are activities that will be conducted by employees who are specifically trained to do this type of work and are trained to recognize the fall hazards. The nature of such work normally exposes the employee to the fall hazard for a short period of time, and any alternative fall protection method selected will ensure that the employee is not exposed to the fall hazard for a greater period of time, as compared to the time it takes to complete the construction task.

CONTROLLED ACCESS ZONES

When using the plan to implement the fall protection options available, workers must be protected through limited access to high hazard locations. When designated fall protection systems are not feasible or create a greater hazard, a foreman or competent person must determine whether a recognized hazard exists and, if so, create a controlled access zone (CAZ) prior to using alternative work practices. A CAZ is defined as an area in which certain types of work may occur without the use of guardrail systems, personal fall arrest systems, or safety net systems. Access to the zone is restricted to authorized entrants only. During some phases of residential construction, the entire residential building may be considered a CAZ zone.

A CAZ is established by control lines,***(4)*** ropes, wires, signs, chains, tapes, or equivalent materials, and supporting stanchions, if necessary. Employees who are authorized to work in the CAZ are those employees who have received training regarding fall protection hazards and systems.

Due to the nature of framing the CAZ is to be used to define three areas of work; 1) joist / decking, 2) exterior wall framing, and 3) truss / roof sheathing as well as related exterior work. The various zones are independent of one another and sequential in nature, thus facilitating the work done by other trades. That is, the zones reflect the dynamic flow of the work and allow other trades access to areas a the framing crew, the controlled access zones (CAZ) move from one phase of the work to the next. To clearly reflect the character of the individual zones, the CAZ signs shall be color coded.

The Company acknowledges that there are times in which employees of other companies will enter the CAZ. If an

employee of another Company enters the CAZ, employees should either stop work to let the person proceed through the hazardous area or continue working after making sure that the other company's employee is not performing work in close proximity to the direct hazard.

(4) If control lines are used, they must comply with the technical requirements of 29 C.F.R. § 1926.502(g)(2).

INSTALLATION OF ROOF TRUSSES AND RAFTERS

During the erection and bracing of roof trusses and rafters, designated fall protection systems may be infeasible or present a greater hazard to workers. As described above, safety nets are infeasible and could cause the walls to collapse, thereby subjecting the employee to a greater risk. Guardrail, personal fall arrest systems, and scaffolds will not provide adequate fall protection because there are no suitable attachment or anchorage points and may subject an employee to a greater hazard. Ladders could be used for the initial stages of installing trusses.

SAWHORSES

On all walls under eight feet, workers will install interior scaffolds along the interior wall below the location where the trusses and rafters will be erected. "Sawhorse" scaffolds constructed of 46 inch sawhorses and 2 x l0 planks will often allow workers to be elevated high enough to allow for the erection of trusses and rafters without working on the top plate of the wall.

In structures that have walls higher than eight feet, and where the use of scaffolds and ladders would create a greater hazard, safe working procedures will be utilized when traversing the plate line and will be monitored by the foreman or competent person. During all stages of truss and rafter erection, the stability of the trusses and rafters must be monitored.

PROCEDURES TO MANUALLY INSTALL TRUSSES AND RAFTERS

The Company requires the following steps to protect workers who are exposed to fall hazards while working from the top plate installing trusses and rafters:

(1) Only designated and trained workers who have completed fall protection training will be allowed to traverse the plate line during roof truss or rafter installation:

(2) The foreman or competent person shall ensure that the CAZ has been established.

(3) Workers shall have no other duties to perform during truss and rafter erection procedures;

(4) All trusses and rafters will be adequately braced before any worker can use the truss and rafter as a support;

(5) Workers will remain on the top plate using the previously stabilized truss and rafter as a support while other trusses and rafters are being installed;

(6) Workers will leave the area of the secured trusses only when it is necessary to secure another truss and rafter,

(7) The first two trusses and rafters will be set from ladders leaning on side walls at points where the walls can support the weight of the ladder;

(8) A worker will climb onto the top plate via a ladder to secure the peaks of the first two trusses and rafters being installed; and

PROCEDURES FOR SECURING TRUSSES AT THE PEAK

The workers responsible for securing trusses at the peaks traditionally are positioned at the peak of the trusses and rafters. There are also situations where workers securing rafters to ridge beams will be positioned on top of the ridge beam.

The following steps should be taken to protect workers who are exposed to fall hazards while securing trusses and rafters

at the peak of the trusses and ridge beam:

(1) Only designated and trained workers will be allowed to work at the peak during roof truss or rafter installation:

(2) Once truss or rafter installation begins, workers not involved in that activity shall not stand or walk below or adjacent to the roof opening or exterior walls in any area where they could be struck by falling objects;

(3) Workers shall have no other duties than securing or bracing the trusses and ridge beam;

(4) Workers positioned at the peaks or in the webs and chords of trusses or on top of the ridge beam shall work from a stable position, either by "riding the ridge" or standing in truss web or chord or other equivalent surface that provides additional stability or by positioning themselves in previously stabilized trusses and rafters and leaning into and reaching through the trusses and rafters; and

(5) Workers shall not remain on or in the peak/ridge any longer than necessary to safely complete the task.

INSTALLATION OF ROOF SHEATHING

Workers typically install roof sheathing after all trusses and rafters and temporary truss bracing are in place. Roof structures are unstable until the roof system, including sheathing, is completed. Workers installing roof sheathing cannot be protected from fall hazards by designated fall protection systems until ft is determined that the roofing system can be used as an anchorage point.

As described above, when installing roof sheathing, trusses and rafters are subject to collapse if a worker falls while attached to a truss with a belt or harness. Safety nets could also cause collapse, and there is no place to attach guardrails. Scaffolds and ladders will not provide adequate fall protection and may subject an employee to a greater hazard. Personal fall arrest systems may not be used until the roofing system can be used as an anchorage point, which is after the roof has been nailed and, therefore, constitutes a completed system.

The Company requires that the following steps be taken to protect workers who are exposed to fall hazards while installing roof sheathing:

(1) Once roof sheathing installation begins, workers not involved in that activity shall not stand or walk below or adjacent to the roof opening or exterior walls in any area where they could be struck by failing objects;

(2) The foreman or competent person shall ensure that the CAZ has been established prior to placement of the first piece of roof sheathing;

(3) The foreman or competent person may order work on the roof to be suspended for brief periods as necessary to allow other workers to pass through such areas when this would not create a greater hazard;

(4) Only designated and trained workers shall install roof sheathing;

(5) The bottom row of roof sheathing may be installed by workers standing in truss webs or chords;

(6) After the first row of roof sheathing is installed, a slide guard extending the width of the roof shall be securely attached to the roof. Slide guards are to be constructed of no less than nominal 6" height capable of limiting the uncontrolled slide of workers and materials. Workers should install the slide guard while standing in truss webs and leaning over the sheathing. This procedure will continue until the slide guard extends across the entire leading edge and is to be repeated at every side of the building not to include gable end sides. Slide guards should be placed as close as possible in front of the horizontal fascia line to reduce the tripping hazard for workers accessing the roof and high enough to minimize interference with the perimeter nailing of sheathing;

(7) Additional rows of roof sheathing may be installed by workers positioned on previously installed rows of sheathing. A slide guard can be used to assist workers in retaining their footing during successive sheathing operations;

(8) For roofs with pitches in excess of 6-in-12, slide guards brackets or blocks will be installed at four-foot intervals and slide guards should be securely attached to the roof at intervals not to exceed 13 feet as successive rows of sheathing are installed;

(9) To minimize the time workers must be exposed to a fall hazard, materials will be staged to allow for the quickest installation of sheathing;

(1 0) All workers will ensure that they have secure footing before they attempt to walk on the sheathing, including cleaning shoes or boots of mud or other slip hazards;

(1 1) When excessive wet weather (rain, snow or sleet) is present, roof sheathing operations shall be suspended unless safe footing can be assured for those workers installing sheathing; and

(12) When strong winds (above 40 miles per hour) are present, roof sheathing operations are to be suspended unless wind breakers are erected.

INSTALLATION OF EXTERIOR AND INTERIOR WALLS

Exterior and interior walls are temporarily braced until either the upstairs floor or roof sheathing has been placed and permanently installed. As described above, safety nets, guardrails, personal fall arrest systems, scaffolds, and ladders are infeasible or subject employees to a greater risk.

During the construction and erection of exterior and interior walls, the Company requires that the following steps be taken to protect workers:

(1) Only designated and trained workers will be allowed to erect walls;

(2) The foreman or competent person shall ensure that the CAZ has been established prior to installation of a wall;

(3) Materials for operations shall be conveniently staged to minimize fall hazards;

(4) Workers constructing walls shall complete as much cutting of materials and other preparation as possible away from the edge of the deck;

(5) Once erecting walls commences, workers not involved in that activity shall not stand or walk below or adjacent to the roof opening or exterior walls in any area where they could be struck by failing objects; and

(6) When erecting walls at the second floor and higher, a painted line six feet from the perimeter will be marked or a control line will be installed prior to any wall erection activities to warn of the approaching unprotected edge.

INSTALLATION OF FLOOR TRUSSES AND JOISTS

As described above, when installing floor trusses and joists, safety nets, guardrails, personal fall arrest systems, and scaffolds are infeasible or subject employees to a greater risk. Ladders and sawhorses may be used for the initial installation.

During the installation of floor trusses and joist, the Company requires that the following steps be taken to protect workers:

(1) Only designated and trained workers will be allowed to install floor trusses and joists;

(2) The foreman or competent person shall ensure that the CAZ has been established prior to installing floor trusses and joists;

(3) Materials for the operations shall be conveniently staged to allow for easy access to workers;

(4) The first floor joists or trusses will be placed into position and secured either from the ground, plate line, ladders or sawhorse scaffolds;

(5) If workers traverse the plate line to complete installation, they shall have no other duties to perform during floor truss and joist installation;

(6) All trusses and rafters will. be adequately braced before any worker can use the truss and rafter as additional support;

(7) If a worker is already on the plate line, and his services are still required, such worker will remain there using the previously stabilized truss and rafter as a support, while other trusses and rafters are being erected;

(8) Workers will leave the area of the secured trusses only when ft is necessary to secure another truss or rafter,

(9) Workers shall not remain or move around unnecessarily on the plate line any longer than is necessary to safely complete the task;

(10) Except for the first two rows of sheathing, workers shall work from the established deck; and

(11) Once installation of floor trusses and joists begins, workers not involved in that activity shall not stand or walk below, or adjacent to, the floor openings or exterior walls in any area where they could be struck by falling objects.

INSTALLATION OF FLOOR SHEATHING

As described above, when installing floor sheathing, safety nets, guardrails, personal fall arrest systems, and scaffolds are infeasible or subject employees to a greater risk. Ladders and sawhorses may be used for the initial installation.

During the installation of floor sheathing, the Company requires that the following steps be taken to protect workers:

(1) Only designated and trained workers will be allowed to install floor sheathing;

(2) The foreman or competent person shall ensure that the CAZ has been established prior to installing floor sheathing;

(3) Materials for the operations shall be conveniently staged to allow for easy access to workers;

(4) The first row of floor sheathing will be installed by workers traversing the plate line or standing in truss webs or chords;

(5) Except for the first two rows of sheathing, workers shall work from the established deck;

(6) Once installation of floor sheathing begins, workers not involved in that activity shall not stand or walk below, or adjacent to, the floor openings or exterior walls in any area where they could be struck by falling objects; and

(7) Workers installing floor sheathing shall perform no other duties.

INSTALLATION OF EAVE , APPLIED ELEVATIONS & POP-OUTS

As described above, when performing eave construction, safety nets, guardrails, personal fall arrest systems, ladders, and scaffolds are infeasible or subject employees to a greater risk. Sawhorses may be used in some circumstances, however.

Eave construction includes installing fascia boards and freeze boards (bird blocks) and cutting rafter tails. Workers responsible for cutting truss rafter tails and installation of material traditionally are positioned with one foot on the plate line and one foot on top of the truss rafter tails at horizontal installation. At gable end installation of material, workers are traditionally positioned between or on top of the gable truss rafter and the adjacent member.

PROCEDURES TO MANUALLY PERFORM EAVE CONSTRUCTION

During the installation of eave construction, the Company requires that the following steps be taken to protect workers:

(1) Only designated and trained workers will be allowed to perform eave construction;

(2) The foreman or competent person shall ensure that the CAZ has been established prior to performing eave construction;

(3) Materials for the operations shall be conveniently staged to allow for easy access to workers;

(4) Once eave construction begins, workers not involved in that activity shall not stand or walk below, or adjacent to, the roof openings or exterior walls in any area where they could be struck by falling objects;

(5) Workers cutting truss rafter tails shall inspect all tails to be cut for any cuts, cracks, knots or any other defect prior to putting any weight onto the tails;

(6) Workers performing eave construction shall perform no other duties;

(7) Workers shall not remain on horizontal truss rafter tails or gable truss rafters or the plate line any longer than necessary to safely complete the task; and

(8) Workers installing fascia board or freeze board shall not over extend themselves to a point at which they are unstable.

SAWHORSES

On all walls under eight feet, workers will install interior scaffolds along the interior wall below the location where eave construction is to be performed. "Sawhorse" scaffolds constructed of 46 inch sawhorses and 2x l0 planks will often allow workers to be elevated high enough to allow for the performance of eave construction without working on the top plate of the wall.

HOLES AND COVERS

Workers should cut the predesignated holes very last. The covers of the holes should be turned and secured to indicate to subsequent worker's in different trades that a hole is present. After cutting the holes and securing the covers, the employees should immediately leave the roof.

WALL OPENINGS

A wall opening is defined as a gap of 30 inches or more high and 18 inches or more wide in a wall or partition. Openings in residential construction consists primarily of window openings. Employees who work on, at, above, or near wall openings where the outside bottom edge of the wall opening is 6 feet or more above a lower level and the inside bottom edge of the wall opening is less than 39 inches above the walking and working surface should be protected from failing by the use of a guardrail system. The guardrail system for a wall opening may consist of a midrail being placed midway between the top and bottom edges of the window or door opening. The midrail materials may consist of wood, steel, tape or other materials as long as the midrail can withstand a force of at least 150 pounds. After a window is installed, no guardrail or other type of fall protection system is required. Furthermore, a guardrail is not required during the installation of a window.

The guardrail system described in this section will. not be used on openings at the ground level, but instead should be implemented on wall openings on upper levels only where the inside bottom edge of the wall opening is 39 inches above the walking and working surface and the outside bottom edge is 6 feet above the lower level and the size of the opening is greater than 30 inches high or 18 inches wide.

ENFORCEMENT

Constant awareness of, and respect for, fall hazards, and compliance with all safety rules are considered conditions of employment. The foreman or competent person, as well as supervisors and individuals in safety or personnel, reserve the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this program.

ACCIDENT INVESTIGATIONS

All accidents that result in injury to workers, regardless of their nature, shall be investigated and reported. It is an integral part of any safety program that documentation take place as soon as possible so that the cause and means of prevention can be identified to prevent a reoccurrence.

In the event that an employee falls or that some other serious and related incident occurs, this plan shall be reviewed to determine if additional practices, procedures, or training needs to be implemented to prevent similar types of falls or incidents from occurring.

CHANGES TO PLAN

Any changes to the plan will be approved by a qualified person. This plan shall be reviewed by a qualified person as the job progresses to determine if additional practices, procedures or training needs to be implemented by the foreman or competent person to improve or provide additional fall protection. Workers shall be notified and trained, if necessary, in the new procedures.

NO CONTRACT RIGHTS IN FAVOR OF EMPLOYEES

This policy is not meant to be a contract, and the Company may amend, change or discontinue this fall protection plan at any time. Employment at the Company is at-will and may be terminated by the employee or by the Company at any time, with or without cause.

APPENDIX: CRANES

PROCEDURES TO INSTALL TRUSSES AND RAFTERS BY CRANE

Crane operations are acceptable for lifting, positioning, or moving loads. However, there are many cases in residential construction when cranes are not available or are not feasible due to terrain and/or dose proximity of buildings. Special types of residential construction, such as zero lot-line developments, often cannot be adequately accessed by cranes. Cranes may be used to stage or preposition building materials to expedite construction time.

Cranes shall be used in residential construction only when the foreman or competent person determines that:

(1) The use of a crane is feasible and will not create a greater hazard;

(2) A crane with the necessary load capacity is available; and

(3) The crane and crane operator are in full compliance with Subpart N, Subpart V, and Subpart 0. 29 C.F.R. § 1926.550 to.556,.601, and.952.

Whenever one or more of the requirements above cannot be met, the application of cranes in residential construction is not feasible or may subject an employee to a greater hazard and, therefore, is prohibited.

The Company requires that the following steps be taken to protect and reduce exposure to workers from fall hazards during crane operations:

(1) Only designated and trained workers who have completed fall protection and crane training *shall* be allowed to install roof trusses or rafters;

(2) The foreman or competent person shall ensure that the CAZ has been established;

(3) Workers shall have no other duties to perform during truss and rafter erection procedures;

(4) The foreman or competent person is positioned to ensure that the crane operator is aware of the positioning and condition of the load at all times and assists the crane operator in putting the load in the correct location. For the purpose of this plan, the foreman or competent person v,/ill ensure a safe operation and maintain constant visual observation with the workers, as well as the load and the crane operator,

(5) The area beneath the swing radius area of the crane and load shall be monitored to ensure that all individuals are kept clear of loads about to be lifted and of suspended loads, as required by 29 C.F.R. § 1926.550(a)(19);

(6) Truss package and bundle *will.* be tethered and controlled by a designated worker. The tether line will be in good condition and long enough to keep designated worker clear from suspended loads;

(7) Only designated workers positioned at the plate line will position, brace, and detach the crane to-truss attachments;

(8) Workers on the plate line will not position themselves under the suspended load of the package or bundle at any time; and

(9) Workers will not (other than the worker tethering the package or bundle) hold onto the package or bundle until after being positioned and lowered to just above the plate line. At this point, workers can hold onto the package or bundle and make final adjustments to position the package or bundle.